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Serial No.: 10/820,237
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Docket No.: ZIL-519-1C

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1-54. (Canceled)

55. (new) A method, comprising:

generating a sawtooth signal, wherein the sawtooth signal has an amplitude;

generating a correction signal with no discontinuities, wherein the correction signal has a vertical retrace time t_{VR} and a vertical active time t_{VA} ;

modulating the amplitude of the sawtooth signal using the correction signal to generate a deflection signal; and

amplifying the deflection signal to generate a deflection current signal, wherein the deflection current signal is not distorted when the correction signal transitions from the vertical retrace time t_{VR} to the vertical active time t_{VA} .

56. (new) The method of claim 55, wherein the generating the correction signal is performed by combining a first correction signal component with a second correction signal component.

57. (new) The method of claim 56, wherein the first correction signal component has a constant amplitude during the vertical active time t_{VA} .

58. (new) The method of claim 56, wherein the second correction signal component has a constant amplitude during the vertical retrace time t_{VR} .

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59. (new) The method of claim 56, wherein the first correction signal component has an amplitude, and wherein the amplitude of the first correction signal component varies parabolically.

60. (new) The method of claim 55, wherein the sawtooth signal is a horizontal sawtooth signal, and wherein the correction signal is a horizontal correction signal.

61. (new) The method of claim 55, wherein the generating the correction signal comprises generating a higher-order signal.

62. (new) A horizontal deflection generator, comprising:

a circuit that generates a horizontal sawtooth signal having an amplitude;
and

means for modulating the amplitude of the horizontal sawtooth signal using a horizontal correction signal to generate a horizontal deflection current signal, wherein the horizontal correction signal has no discontinuities, wherein the horizontal correction signal has a vertical active time t_{VA} and a vertical retrace time t_{VR} , and wherein the horizontal deflection current signal is not distorted after a transition from the vertical retrace time t_{VR} to the vertical active time t_{VA} .

63. (new) The horizontal deflection generator of claim 62, wherein the horizontal correction signal is a continuous signal.

64. (new) The horizontal deflection generator of claim 62, wherein the means comprises an amplifier, wherein the means generates a modulated horizontal sawtooth signal, and wherein the amplifier generates the horizontal deflection current signal by amplifying the modulated horizontal sawtooth signal.

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65. (new) The horizontal deflection generator of claim 64, wherein the amplifier has a limited frequency bandwidth.

66. (new) The horizontal deflection generator of claim 62, wherein the horizontal deflection generator is part of a raster display system.

67. (new) The horizontal deflection generator of claim 62, wherein the horizontal deflection generator is implemented on a single integrated circuit device.

68. (new) The horizontal deflection generator of claim 62, wherein the horizontal deflection generator is implemented in software.

69. (new) The method of claim 55, wherein a circuit generates the correction signal, and wherein the circuit includes a level shifter.

70. (new) The method of claim 69, wherein the circuit includes an inverter.

71. (new) The method of claim 69, wherein the circuit includes a gain controller.

72. (new) A horizontal deflection generator, comprising:

 a circuit that generates a horizontal sawtooth signal having an amplitude;
and

 means for modulating the amplitude of the horizontal sawtooth signal using a horizontal correction signal to generate a horizontal deflection current signal, wherein the horizontal correction signal does not have any discontinuities.

73. (new) The horizontal deflection generator of claim 72, wherein the horizontal deflection generator is implemented in software.

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74. (new) The horizontal deflection generator of claim 72, wherein the means comprises an amplifier, wherein the means generates a modulated horizontal sawtooth signal, and wherein the amplifier generates the horizontal deflection current signal by amplifying the modulated horizontal sawtooth signal.